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## **CLAIMS**

- 1. Device for servo-control of a dental handpiece (5) activated by an ultrasound generator, comprising supply means (1), characterized in that:
- it comprises two circuits, namely a work circuit to whose terminals (S1, S2) the ultrasound generator is connected, and a control circuit,
  - the work circuit comprises an inductance  $(L_s)$  in parallel between its output terminals  $(S1,\,S2)$ ,
- the supply (1) is adapted to deliver at the output (A, B) a voltage (V<sub>s</sub>) in phase with a voltage which is delivered thereto on its input (I, J),
- the control circuit is constituted by an intensity transformer  $(T_2)$  whose primary (7) is arranged in series in the work circuit and whose secondary (11) forms, with a capacitor (13) and a resistor (15) associated therewith, an RLC circuit of which the voltage at the terminals of the resistor (15) is sent to the input of said supply (1),
- the control circuit comprises means for varying the value of the capacitor (13) and/or that of the self-induction coil of the secondary (11) of the transformer (T<sub>2</sub>).
  - 2. Device according to Claim 1, characterized in that the secondary (11) of the intensity transformer  $(T_2)$  comprises a core mobile inside its winding adapted to vary its inductance  $(L_2)$ .

- 3. Device according to one of Claims 1 or 2, characterized in that the supply means (1) are connected to the work circuit via a voltage transformer  $(T_1)$ .
- 4. Device according to one of the preceding Claims, characterized in that the inductance (L<sub>s</sub>) arranged between the output terminals (S<sub>1</sub>, S<sub>2</sub>) of the work circuit is such that, with the intrinsic capacitance of the handpiece (5) and the internal resistance thereof, an RLC circuit close to the resonance is formed.